

Abstract of the Disclosure

A method for preparing high-purity germanium hydride by electrolysis of an aqueous-alkaline solution, containing germanium dioxide by first passing an electrical current through the aqueous-alkaline solution to minimize contaminant concentration. The electrolysis is performed with cross-mixing of electrolyte from the cathode chamber and the anode chamber. The germanium hydride obtained after synthesis is isolated from the mixture with hydrogen. For more thorough purification, the isolated germanium hydride is purified. The result is preparation of germanium hydride in which the total content of the contaminants SiH_4 , AsH_3 , PH_3 , H_2S , CH_4 , Fe, Ni, Al, Ca, Mg, etc. is not more than $1 \cdot 10^{-6}\%$ - $1 \cdot 10^{-7}\%$, which is acceptable for comparatively wide fields of practical application.